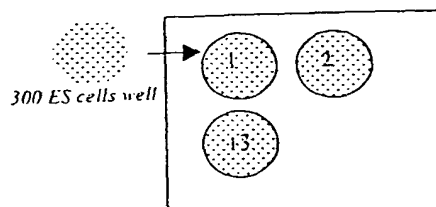
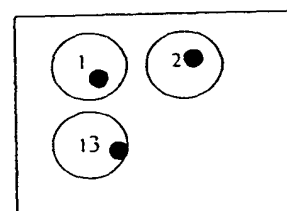


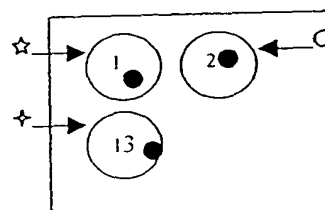
Day 0 R1 ES cells (300 cells/well)
in differentiating medium are
plated on 96 well non-coated plates



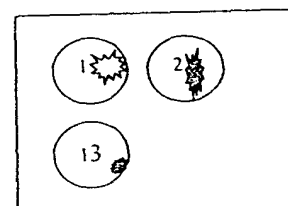
Formation of embryo-like aggregate (7 d)



Day 7 Add chemical compounds (#1 to #96) into each well.



Induce further differentiation (7-14 d)



Day 14 Extract RNA on the plate, RT-PCR on the plate

Day 21

Evaluate the effects of the drugs (#1-96) on
mRNA expression of tissue-specific genes (e.g.
albumin mRNA for hepatocyte differentiation).

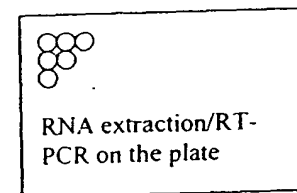


FIG. 1

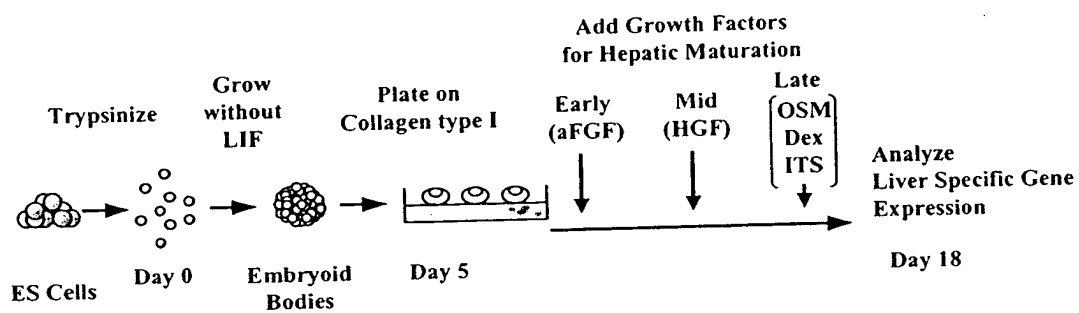


FIG. 2

10045721.102604

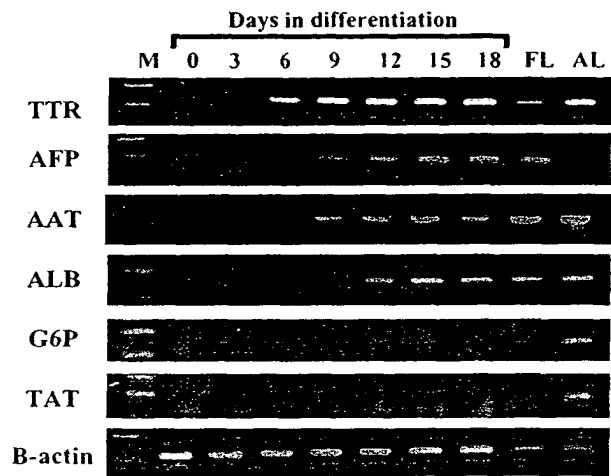


FIG. 3

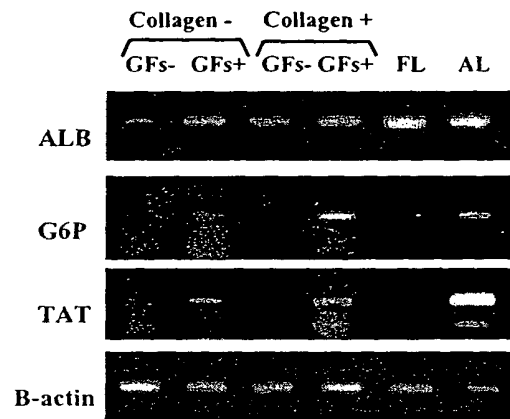


FIG. 4

10045721.102601

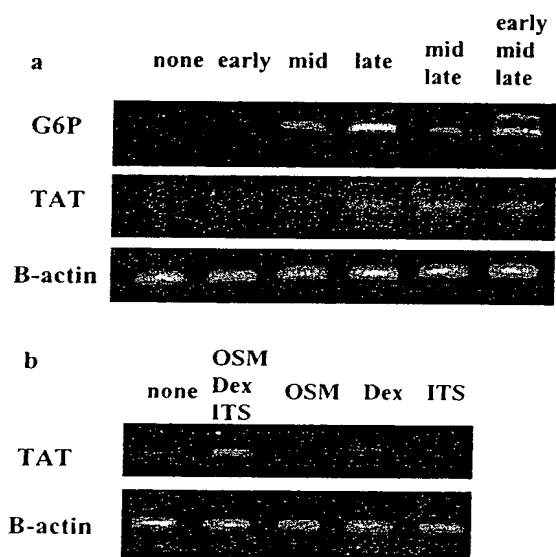


FIG. 5

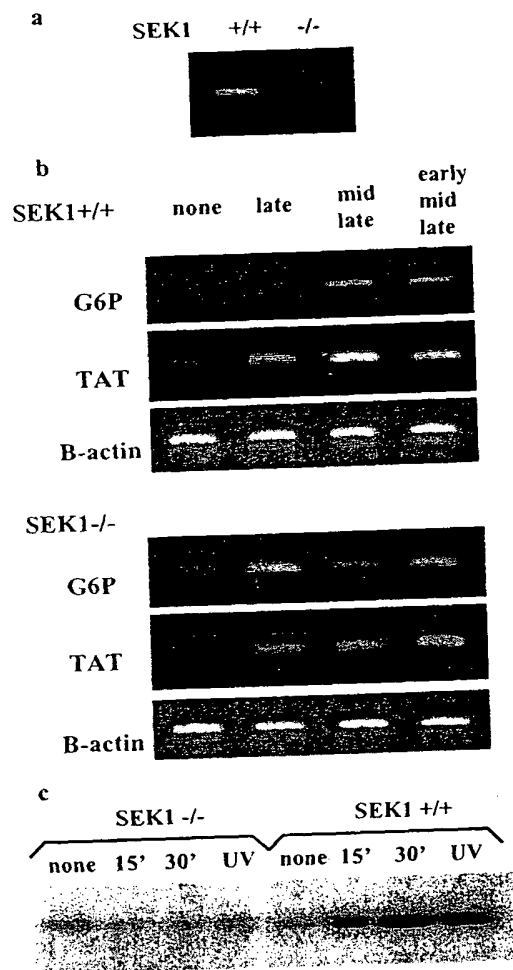


FIG. 6

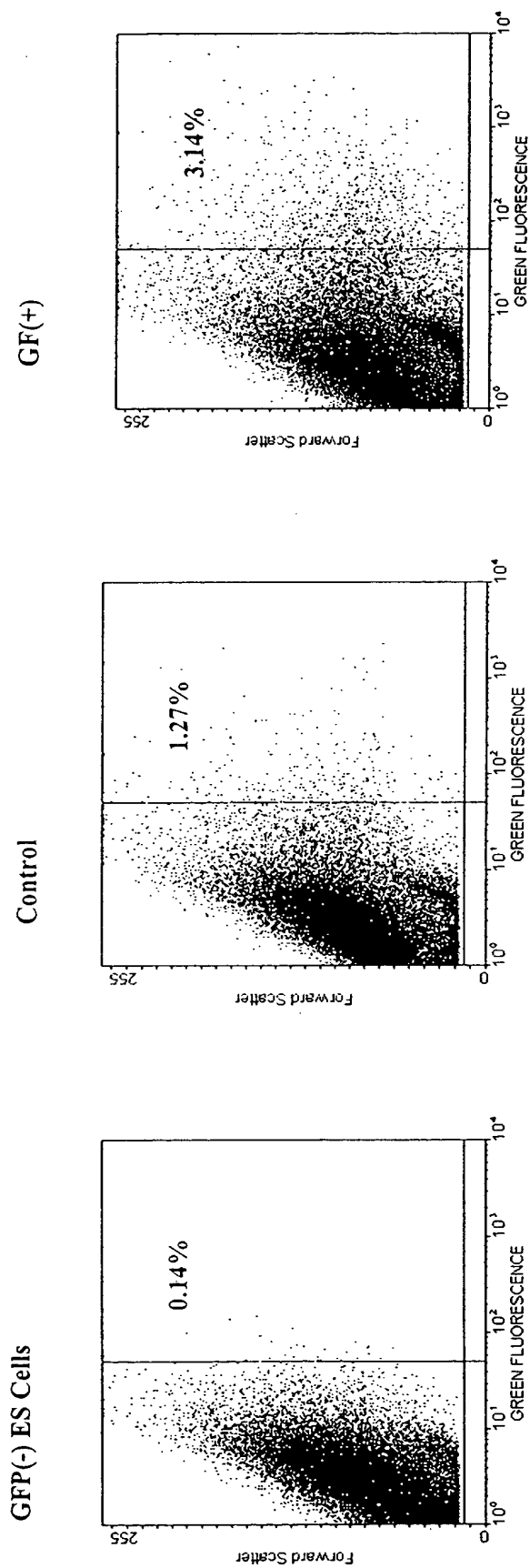


FIG. 7